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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/561,908	12/21/2005	Kazunori Suenaga	Q91563	1500
72875	7590	03/17/2009	EXAMINER	
SUGHRUE MION, PLLC 2100 Pennsylvania Avenue, N.W. Washington, DC 20037			WELCH, DAVID T	
			ART UNIT	PAPER NUMBER
			2628	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/561,908	Applicant(s) SUENAGA ET AL.	
	Examiner DAVID T. WELCH	Art Unit 2628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 December 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 December 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12/21/2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Applicant's amendments filed on December 30, 2008 have been entered. Claims 1, 3, and 5 have been amended. No claims have been canceled. Claims 7-19 have been added. Claims 1-19 are still pending in this application, with claims 1, 3, 5, 7, 18, and 19 being independent.

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on December 21, 2005 is in compliance with the provisions of 37 CFR 1.97. The references that were previously not considered by the Examiner are cited in the International Search Report and listed on the SB/08. Accordingly, the information disclosure statement is being considered by the examiner, and a new PTO-1449 is attached hereto.

Claim Objections

3. Claim 1 is objected to because of a minor typographical error: in the second limitation, "execute processing including color space conversion to the processing target image data" should be amended to read --execute processing including color space conversion of the processing target image data--. Appropriate correction is required.

4. Claim 7 is objected to because of a minor typographical error: "when displaying the main image, displays the image" should be amended to read --when displaying the main image, displays the main image--. Appropriate correction is required.

5. Claims 7, 18, and 19 are objected to because of minor typographical errors: “main image that have been” and “thumbnail image that have been” should be amended to read --main image that has been-- and --thumbnail image that has been--.

Appropriate correction is required.

6. Claim 19 is objected to because of minor typographical errors: in the third and fourth limitations, “a program code that causing” should be amended to read --a program code that causes--. Appropriate correction is required.

7. Claim 19 is objected to because of minor typographical errors: in the third limitation, “image data representing an main image” should be amended to read --image data representing a main image--. Appropriate correction is required.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 7-9, 12, and 17-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Hoshuyama et al. (U.S. Patent Application Publication No. 2004/0246506), referred herein as Hoshuyama.

Regarding claim 7, Hoshuyama teaches an image display device, comprising an information acquisition unit that acquires color space information that specifies a color space related to image data representing a main image (figure 2; page 2, paragraph 22, lines 1-4; paragraph 23, lines 1-3; page 3, paragraph 26, lines 1-2; paragraphs 30 and 31); and a display unit that, when displaying the main image, displays the main image that has been converted by a first color space conversion according to the color space information (page 2, paragraph 23, lines 1-3; paragraph 24, lines 13-16; page 3, paragraph 32, lines 1-4; paragraph 36, lines 1-6; page 4, paragraph 46 the last 4 lines; paragraph 47, lines 1-4; page 5, paragraph 55, lines 4-10), and when displaying a thumbnail image of the main image, displays the thumbnail image that has been converted by a prescribed second color space conversion regardless of the color space information (page 2, paragraph 23, lines 1-3; paragraph 24, lines 16-21; page 3, paragraph 26, the last 3 lines; paragraph 32, lines 1-4; paragraph 36, lines 9-17; page 4, paragraph 46 the last 4 lines; paragraph 47, lines 1-4; page 5, paragraph 55, lines 4-10).

Regarding claim 8, Hoshuyama teaches the image display device according to claim 7, and further teaches the device, wherein the information acquisition unit acquires the color space information from an image data file containing the image data (figure 2; page 2, paragraph 22, lines 1-4; page 3, paragraph 26, lines 1-2; paragraphs 30 and 31).

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Regarding claim 9, Hoshuyama teaches the image display device according to claim 8, and further teaches the device, wherein the color space information specifies Adobe RGB color space (page 3, paragraph 36, lines 9-17; page 4, paragraph 45).

Regarding claim 12, Hoshuyama teaches the image display device according to claim 8, and further teaches the device, wherein the color space information specifies a color space that is larger than sRGB color space (page 2, paragraph 24, lines 1-8; page 3, paragraph 36, lines 9-17; page 4, paragraph 45).

Regarding claim 17, Hoshuyama teaches the image display device according to claim 8, and further teaches the device, wherein the image data is JPEG compressed data (page 2, paragraph 24, lines 16-21).

Regarding claims 18 and 19, the limitations of these claims correspond to the limitations of claim 7; thus they are rejected on the same grounds as claim 7.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshitani et al. (U.S. Patent Application Publication No. 2002/0089702), referred herein as Yoshitani, in view of Hoshuyama.

Regarding claim 1, Yoshitani teaches an image processing apparatus for processing an image based on an image data set including main image data that represents a main image, reduced image data that represents a reduced image of the main image (figure 2A, JPEG compression 250; page 4, paragraph 65, lines 1-5; page 7, paragraph 109, lines 3-7), and color space identification information that expresses a color space related to the main image data, the main image data and the reduced image data and the color space identification information being associated with one another (page 4, paragraphs 62 and 63; paragraph 65, lines 1-5), wherein the color space identification information can indicate which of multiple color spaces including a prescribed standard color space and a particular color space is to be used (page 4, paragraph 63, lines 4-8; page 8, paragraph 110, lines 4-12; page 4, paragraph 66, lines 1-4; for example, YCbCr is the prescribed color space, while CMYK is the particular color space), the image processing apparatus comprising: a data processor configured to select either one of the main image data and the reduced image data as processing target image data, and to execute processing including color space conversion of the processing target image data (figure 2A, color conversion selecting section 246, converting sections 249, 251, 247, and 248; page 4, paragraph 61, lines 1-4; page 8, paragraph 110, lines 4-12; page 4, paragraph 63, lines 4-8), wherein the data processor executes a prescribed basic color space conversion regardless of content of the color space identification information to obtain first converted image data of the reduced image when the reduced image is the processing target, while the data processor executes a specified color space conversion utilizing a color space specified by the color space identification information to obtain second converted image data of the main

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image when the main image is the processing target (page 4, paragraph 63, lines 2-8; paragraph 65, lines 1-5; page 4, paragraph 66, lines 1-2; the data processor executes a prescribed basic color space conversion, in this case YCbCr, when the processing target is the reduced JPEG image; the data processor executes a specified color space conversion, in this case CMYK, when the processing target is the non-compressed main image). Yoshitani does not explicitly teach the apparatus, wherein the reduced image is a thumbnail image, and wherein the first and second converted image data are expressed by an identical color system. Hoshuyama teaches an image file processing apparatus comprising processing of a main image, and a thumbnail image that represents the main image, wherein color space conversions are performed to obtain color space converted image data, and wherein the converted image data are expressed by an identical color system (page 2, paragraph 23, lines 1-3; paragraph 24, lines 13-21; page 3, paragraph 26, the last 3 lines; paragraph 32, lines 1-4; paragraph 36, lines 1-6 and 9-17; page 4, paragraph 46 the last 4 lines; paragraph 47, lines 1-4; page 5, paragraph 55, lines 4-10; the color space converted data resulting from first and second conversions from sRGB and AdobeRGB, respectively, are expressed in an identical color system, namely, the "inherent color space"). As taught by Hoshuyama, this main image and thumbnail processing and expression of the converted data in identical color systems results in the output of reliable and accurate color representation, regardless of any difference in color information provided by an input device. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine the processing of Hoshuyama with the invention disclosed by Yoshitani.

Regarding claim 2, Yoshitani in view of Hoshuyama teaches an image processing apparatus according to claim 1, and further teaches the apparatus, wherein the color space specified by the color space identification information is the particular color space (Yoshitani, page 4, paragraph 66, lines 1-2; as previously discussed, CMYK is both the identified information and the particular color space).

Regarding claims 3 and 4, the limitations of these claims correspond to the limitations of claims 1 and 2, respectively; thus they are rejected on the same grounds as the limitations of claims 1 and 2, respectively.

Regarding claims 5 and 6, the limitations of these claims correspond to the limitations of claims 1 and 2, respectively; thus they are rejected on the same grounds as the limitations of claims 1 and 2, respectively.

12. Claims 10, 11, and 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoshuyama, in view of Elswick et al. (U.S. Patent No. 6,791,620), referred herein as Elswick.

Regarding claim 10, Hoshuyama teaches the image display device according to claim 9, but does not explicitly teach the apparatus, wherein the display unit is able to display a plurality of the thumbnail images in a single window. Elswick teaches an apparatus for multi-format video processing, wherein color space conversion is performed on selected image data, and wherein the image data to be processed is presented on a display unit able to display a plurality of thumbnail images in a single

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window (figure 7, frame browser 250; column 16, lines 8-14, 18-25, 34-36, and 42-54).

As was very well known at the time of the invention, and taught by Elswick, displaying multiple thumbnail images in a single window facilitates easy and intuitive access and manipulation of the image data, thereby improving the speed and efficiency with which the image data can be processed. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine the display unit of Elswick with the invention disclosed by Hoshuyama.

Regarding claim 11, Hoshuyama in view of Elswick teaches the image display device according to claim 10, and further teaches the device, wherein the image data is JPEG compressed data (Hoshuyama, page 2, paragraph 24, lines 16-21).

Regarding claims 13 and 14, the limitations of these claims correspond to the limitations of claims 10 and 11, respectively; thus they are rejected on the same grounds as the limitations of claims 10 and 11, respectively.

Regarding claims 15 and 16, the limitations of these claims correspond to the limitations of claims 10 and 11, respectively; thus they are rejected on the same grounds as the limitations of claims 10 and 11, respectively.

Response to Arguments

13. Applicant's arguments, see page 10, filed December 30, 2008, with respect to the drawing objections have been fully considered and are persuasive. The amendments to the specification are sufficient to overcome the original drawing deficiencies; thus the objections to the drawings have been withdrawn.

14. Applicant's arguments, see page 10, filed December 30, 2008, with respect to the claim objection have been fully considered and are persuasive. The amendments to claim 5 are sufficient to overcome the informalities of the original claim; thus the objection to this claim has been withdrawn.

15. Applicant's arguments with respect to claims 1-19 have been fully considered but are moot in view of the new ground(s) of rejection.

Conclusion

16. The following prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Nishi et al. (U.S. Patent Application Publication No. 2002/0097334); Digital camera.

Kawanishi et al. (U.S. Patent Application Publication No. 2005/0018907); Image pickup apparatus and method.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DAVID T. WELCH whose telephone number is (571)270-5364. The examiner can normally be reached on Monday-Thursday, and alternate Fridays, 7:30am-5:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Xiao Wu can be reached on (571)272-7761. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/dtw/

/XIAO M. WU/

Supervisory Patent Examiner, Art Unit 2628